

**REMARKS**

Claims 66, 72, 86-88, 91 and 105-108 are all the claims pending in the application; claims 88, 105 and 106 are allowed; claims 66, 72, 86, 87, 91, 107 and 108 are rejected.

Claims 66, 72, 86, 87, 91, 107 and 108 have been amended herein.

Support for the amendment to claims 66 and 72 to specify that amino acids 380 to 599 of SEQ ID NO: 2 (claim 66) or that amino acids 1 to 39 of SEQ ID NO:6 (corresponding to 561 to 599 of SEQ ID NO: 2) (claims 72) “*are at the carboxy terminus of said first polypeptide*” may be found in Figure 10, in which is shown seven polypeptides that comprises SEQ ID NO:6 at their carboxy terminus, each of which were shown to have the ability to bind SEQ ID NO:4.

Support for both the amendment to claims 86, 87, 106 and 107 to recite that “*amino acids of said first polypeptide corresponding to amino acids 561-599 of SEQ ID NO: 2 have 100% identity with amino acids 561-599 of SEQ ID NO: 2*” and the amendment to claim 91 to recite that “*amino acids of said first amino acid sequence corresponding to amino acids 561-599 of SEQ ID NO: 2 have 100% identity with amino acids 561-599 of SEQ ID NO: 2*” may be found at Figure 10; at page 12, lines 7 to 21 (lines 19-21 in particular); at page 13, line 28 to page 14, line 12; and at page 57, line 3 to page 59, line 23. More particularly, polypeptides having a domain with 100% identity with amino acids 561-599 of SEQ ID NO: 2 are included among those polypeptides that comprise SEQ ID NO:6 (corresponding to 561 to 599 of SEQ ID NO: 2).

Support for the amendment to recite that the primase “*binds a polypeptide comprising SEQ ID NO:4*” in claims 91, 107 and 108 may be found at page 11, lines 10-14, and page 14, lines 23-24 (indicating that SEQ ID NO:4 is the 96 ORF 78 polypeptide). Additional support may be found in the definitions of “STAAU\_R9” (i.e. dnaG or primase) at pages 20 and 21.

No new matter has been added. Entry of the amendment is respectfully requested.

**I. Interview**

Applicants thank the Examiner for the consideration shown during the interview conducted by telephone on May 3, 2005. Included herewith is Applicants' summary of the interview.

**II. Correction of Inventorship**

During the interview, the Examiner acknowledged receipt of Applicants' request to correct the inventorship of the instant application, filed on October 30, 2003. The Examiner indicated that he would attend to the correction of the inventorship, and request that an updated Official Filing Receipt be provided to Applicants. Applicants appreciate and thank the Examiner for his efforts in this regard.

**III. Rejection of Claims Under 35 U.S.C. §112, first paragraph**

At paragraph 7 of the Office Action, claims 66, 72, 86-87, 91 and 107-108 are rejected under 35 U.S.C. §112, first paragraph, as being non-enabled.

Claims 66 and 72

At pages 7-8 of the Office Action, the Examiner states that making the full scope of the claimed polypeptides (claim 66) or compositions (claim 72) would require undue experimentation. The Examiner states that there is no evidence of record that a polypeptide having an internal amino acid sequence of SEQ ID NO:6 would have the ability to bind to SEQ ID NO:4. The Examiner further states that, with the exception of polypeptides having SEQ ID NO:6 at their C-terminal end, the specification provides no guidance as to those polypeptides that *comprise* SEQ ID NO:6 that are likely or not to bind SEQ ID NO:4.

Included herewith is an amendment to claims 66 and 72 such that the polypeptides recited in these claims each have the amino acid sequence of SEQ ID NO:6 at the C-terminal end of the polypeptide. As the Examiner has indicated that such polypeptides are fully enabled by the specification, Applicants respectfully assert that these claims, as amended, are fully enabled. Accordingly, Applicants respectfully request reconsideration and withdrawal of this portion of the rejection.

Claims 86-87

At page 10 of the Office Action, the Examiner states that undue experimentation would be required to make the broad scope of the polypeptides as encompassed by claims 86 and 87. The Examiner states at page 11 that the polypeptides of these claims are not required to at least have SEQ ID NO:6. The Examiner contends that trial and error would be required by the skilled artisan to determine which variants of SEQ ID NO:2 have the desired binding activity.

Included herewith are amendments to claims 86 and 87 such that these claims now recite an invariant domain of the claimed polypeptides, defined as SEQ ID NO:6. As each of the polypeptides recited in these claims possesses an unaltered version of SEQ ID NO:6, each of the polypeptides would be expected to bind to SEQ ID NO:4. Therefore, the skilled artisan would understand that each member of the claimed genus binds SEQ ID NO:4 and undue experimentation would not be required to practice the invention as recited in these amended claims. Furthermore, the Examiner has indicated that polypeptides with these characteristics are fully enabled by the specification.

Applicants therefore respectfully assert that claims 86-87, as amended, are fully enabled. Accordingly, Applicants respectfully request reconsideration and withdrawal of this portion of the rejection.

Claims 91 and 107-108

At page 12 of the Office Action, the Examiner states that while the claims are limited to those polypeptides having a recited biological activity, there is no guidance as to which of the variants will retain the recited activity.

Included herewith are amendments to the noted claims such that the claims recite (1) polypeptides that bind SEQ ID NO:4, and (2) polypeptides that have an invariant domain defined as SEQ ID NO:6. The skilled artisan would be enabled to practice the full scope of the invention as the claimed polypeptides each possess SEQ ID NO:6 and the ability to bind SEQ ID NO:4. Furthermore, the Examiner has indicated that polypeptides with these characteristics are fully enabled by the specification. Applicants therefore respectfully assert that these claims, as amended, are fully enabled, and respectfully request reconsideration and withdrawal of this portion of the rejection.

**IV. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.111  
U.S. Appln. No. 10/025,222

Q79015

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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**23373**

CUSTOMER NUMBER

Date: May 4, 2005